

Clearing the Air

Your Health and Burn Pits

Building Better Brain Health

New Program Available

Looking Ahead

Center Tracks Eye Care

The Long Road Home

Assistance for Returning Soldiers

maintaining the data needed, and c including suggestions for reducing	lection of information is estimated to ompleting and reviewing the collect this burden, to Washington Headqu uld be aware that notwithstanding an DMB control number.	ion of information. Send comments arters Services, Directorate for Info	s regarding this burden estimate ormation Operations and Reports	or any other aspect of the s, 1215 Jefferson Davis	nis collection of information, Highway, Suite 1204, Arlington	
1. REPORT DATE 2010		2. REPORT TYPE		3. DATES COVE 00-00-2010	to 00-00-2010	
4. TITLE AND SUBTITLE			5a. CONTRACT NUMBER			
Force Health Prote	5b. GRANT NUMBER					
				5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S)			5d. PROJECT NUMBER			
				5e. TASK NUMBER		
				5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Force Health Protection and Readiness Magazine,5205 Leesburg Pike, Sky 1, Suite 810,Falls Church,VA,22041				8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)		
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION/AVAIL Approved for publ	ABILITY STATEMENT ic release; distributi	on unlimited				
13. SUPPLEMENTARY NO	OTES					
14. ABSTRACT						
15. SUBJECT TERMS						
16. SECURITY CLASSIFIC		17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON		
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified	Same as Report (SAR)	24		

Report Documentation Page

Form Approved OMB No. 0704-0188



The Magazine of Force Health Protection and Readiness
2010 ■ Volume 5, Issue 2

Acting Deputy Assistant Secretary of Defense for Force Health Protection and Readiness Col. Donald L. Noah

Director of Strategic Communication for the Military Health System Michael E. Kilpatrick, M.D.

Editor

Nicole Romanies

Art Director

Del Moran

Graphic Designer

FHP&R Strategic Communications Team

Laura Curtin Kelly Kotch Terri Lukach Matt Puesche

Richard Searles

FHP&R is published quarterly by the FHP&R Communications Office.

Print and visual submissions of general interest to active duty, reserve component members, veterans and families are invited. Please send articles with name, phone number, e-mail, mailing address and

Force Health Protection and Readiness Magazine

5205 Leesburg Pike, Sky 1, Suite 810 Falls Church, Virginia 22041 Phone: (703) 681-3279 • Fax: (703)

F-mail: FHPWehmaster@tma osd mil

The editor reserves the right to edit all submissions for length, readability and conformance with DoD style and policy.

AUTHORIZATION:

FHP&R is an authorized publication for past and present members of the Department of Defense. Contents of FHP&R are not necessarily the official views of, or endorsed by, the U.S. Government or the Department of Defense.

FEATURES



Reintegration Program
Filling Gap for Guard and Reserve



10
Is Burn Pit Smoke
Affecting Your Health?



12The Bridge to Mental Wellness: The inTransition Program



16DoD/VA Center Tracks Eye Injuries: Improving Vision Research, Care

- 1 A Message from the Acting DASD
- 2 U.S. Army Sponsors First HIV Vaccine Trial Shows Some Effectiveness in Preventing HIV
- 4 Guide Aimed at Improving DoD-NGO Collaborations in Field
- 6 New DoD Laboratory Network System
- 14 Human Research Protections and Oversight: What Service Members Need to Know
- 18 Getting a Good Night's Sleep
- 20 Updated Medical Standards: For Deployments Outside U.S.

A Message from the Acting Deputy Assistant Secretary of Defense for Force Health Protection and Readiness





Welcome to Force Health Protection and Readiness Magazine, a quarterly update on important issues affecting the health and safety of America's military men and women, and their families.

In this issue you will learn how the Department's new in Transition program is building a bridge to mental wellness for Service members navigating between health providers due to a change in service location or status. You'll discover how the latest Defense Center of Excellence is tracking the rising number of eye injuries to improve vision research and care, and why getting a good night's sleep is critical to overall health. And you'll learn the very latest information in the ongoing debate about the effects of exposure to burn pit smoke in theater.

We'll also tell you how the new Yellow Ribbon Program is helping deployed Guard and Reserve members reintegrate into civilian and family life after prolonged deployment abroad. And much, much more!

As always, our writers and staff hope you will consider Force Health Protection and Readiness a key resource for the latest in health news and information for yourself and your family. We welcome your questions, comments, subscription requests and story ideas at FHPwebmaster@tma.osd.mil. Stay safe; stay healthy!

Col. Donald L. Noah

Acting Deputy Assistant Secretary of Defense for Force Health Protection and Readiness

U.S. Army Sponsors First HIV Vaccine Trial Shows Some Effectiveness in Preventing HIV

By: Tiffany Holloway, Deputy Public Affairs Officer, USAMRMC



The HIV pandemic is a global crisis but Army researchers prove there's hope in preventing the infection with new scientific advancement.

In 2003, the U.S. Army Surgeon General sponsored the world's largest HIV vaccine trial in Thailand that tested a "prime-boost" vaccine strategy comprised of two investigational vaccines, ALVAC and AIDSVAX B/E. Results of the trial showed that the vaccine regime is safe and 31.2% effective at preventing HIV infection.

Coordination for the trial was led by the U.S. Military HIV Research Program (MHRP), which is centered at the Division of Retrovirology, Walter Reed Army Institute of Research, a subordinate command of the U.S. Army Medical Research and Materiel Command (USAMRMC). The trial was conducted by the Thai Ministry of Public Health in collaboration with a team of leading Thai and U.S. researchers.

"This significant achievement was the result of longstanding relationships involving many partners from Thailand, NIAID, NIH and the DoD, among other private and commercial companies and volunteers," said Lt. Gen. Eric Schoomaker, Surgeon General, U.S. Army. "This is exciting news. Twenty five years ago, when I was at Walter Reed [Army Medical Center], we didn't even know that HIV would become an epidemic. To think we have come this far in our research and to be part of this trial while I was at USAMRMC is full circle."

The vaccine combination was based on HIV strains commonly circulated in Thailand.

"Given its modest level of efficacy, this prime boost regimen is likely unsuitable in its current form for public health purposes. Again, this vaccine was developed for HIV strains commonly circulated in Thailand. Based on the available published data, it is likely that different vaccines may

Results of the trial showed that the vaccine regime is safe and 31.2% effective at preventing HIV infection.

be required for different regions in the world," said Col. Jerome Kim, MHRP deputy director and HIV vaccines product manager for the Army.

This successful international collaboration involved more than 16,000 Thai volunteers who were HIV-negative. Both men and women between the ages of 18 and 30 participated in the study. Half of the participants received the prime-boost vaccine regimen and half received a

placebo. Volunteers received vaccinations over the course of six months and were followed for an additional three years. Volunteers also received HIV tests every six months for three years following the vaccination, and received counseling on how to prevent becoming infected with HIV.

"While our results are very encouraging, we recognize that further study is required to build upon these findings," said Col. Nelson Michael, director of the WRAIR Retrovirology Division and MHRP director.

However, the trial data establishes a new clinical benchmark to guide future vaccine development. This study may result in significant changes in the way researchers choose which vaccines to test; evaluate the immune responses to a vaccine, both in the laboratory and animal models; and design vaccine candidates.

The total cost of the trial was \$105 million which was less than expected.

"The Army will continue to be an aggressive sponsor and is committed to developing a globally effective HIV vaccine to protect U.S. and allied troops from infection and to support the U.S. National Security Strategy by reducing the global impact of the disease," said Schoomaker.

Guide Aimed at Improving DoD-NGO Collaborations in Field

By Matt Pueschel, FHP&R Staff Writer

A nupdated "Guide to Nongovernmental Organizations for the Military" is now available to help deploying DoD personnel understand how to work in a collaborative fashion with NGOs they will likely come across during global health missions.

The "Guide to Nongovernmental Organizations for the Military" was originally written in 2002 by Grey Frandsen, then a project officer for the Center for Disaster and Humanitarian Assistance Medicine (CDHAM). Dr. Lynn Lawry, assigned to FHP&R's International Health Division (IHD) through a Henry Jackson Foundation grant at CDHAM, rewrote the guide last summer. "The civil-military world has changed a lot since 2002," she said. The military has had a lot of experiences with NGOs and it needed more of a focus on the military."

Fundamental differences between DoD and NGOs have presented challenges in the field at times, although their relationship is evolving. "We focused on the military so some of the conflict could be mitigated," Dr. Lawry said. "It pulls in [recent] military guidance and doctrine and shows where difficulties between the military and civilian community happen. It is more extensive in talking about coordination and adds a section on security, and how NGOs do security. They have their own security measures and protocols, which have developed in the last 10 years. They don't [always] have to go to the military [for security]. There are a lot of myths that we debunked in this book."



Earthquake survivors receive shelter packages containing shelter and water in Petit Place Cazeau, Port-au-Prince, Haiti, Feb. 23, 2010. The United States Agency for International Development distributed 500 shelter packages in support of Operation Unified Response. A 7.0 magnitude earthquake on Jan. 12th left thousands of Haitians displaced. (U.S. Navy photo by Logistics Specialist 1st Class Kelly Chastain/Released)

Much of the new policy basis for increasing collaboration with NGOs stems from a 2005 DoD directive that elevated the importance of stability operations and directed the department to prepare to conduct them across the range of conflict, disaster and post-conflict environments, and to integrate mission planning and execution with other U.S. government agencies, foreign

governments or security forces, and NGOs.

"In many cases NGOs can operate in space DoD can't. And many NGOs have been in countries longer than DoD and have experience," said Fred Gerber, the Iraq country director for the NGO, Project HOPE.

Gerber acknowledged many NGOs do not want to be associated with uniformed military personnel so that they are not recognized as collaborators in conflict areas. But not all NGOs feel this way. Project HOPE, for example, works with the Army Corps of Engineers on a children's hospital in Basra, Iraq, and has been involved with the Navy's global interagency humanitarian civic assistance hospital ship missions for the last several years. "The Department of State and USAID (U.S. Agency for International Development) are the lead [in diplomacy and development], but are not equipped to operate in combat zones and are not well organized or experienced with these environments and rebuilding health systems," he said. "I've seen a distinct change and improvement in how DoD is reaching out to NGOs. DoD realizes it doesn't have experience in capacity building and needs to partner. NGOs are standard across battlefield spaces and have been there for decades."

Dr. Lawry said the guide gives the military a ready tool for referencing and understanding issues the military may have with NGOs when they are trying to work in an area where NGOs exist.

"There is not enough training early in military careers to understand who and what NGOs are, how they operate, and how they can be helpful," she advised. "There are cultural differences that have to be understood."

The guide recently proved useful in the civil-military relief effort after the devastating January 12 eathquake in Haiti. "We put it on the DoD (Haiti disaster relief) coordination site and we got a lot of feedback quickly that it was really helpful," said Dr. Lawry, who was in Haiti for 10 days assisting with NGO and DoD medical relief coordination. "The civilian U.S. government side liked it, too."

Dr. Lawry said there are also three courses at the Uniformed Services University of the Health Sciences (USU) which focus on these issues and will utilize the new guide in the classroom. "The NGO guidebook is an outstanding resource for clinicians, medical planners and commanders," said Maj. Pat Hickey, MC, USA, Deputy Director for Tropical Public Health at USU. "In today's operation environment, knowing how to leverage the resources and skill sets of NGO partners is a key to mission success. Doing so allows military resources to be employed more efficiently and synchronized with civilian humanitarian aid and development projects."

NGOs bring many strengths to the table that can complement DoD's heavy lift, logistics, trauma lifesaving abilities, and capability to work in hostile areas. NGOs conduct long-term capacity building in a diverse range of areas including water, sanitation, food, schools, and health which are strategically important for the country's health ministry and what the local population wants and can support. "The NGO has local partnerships, a history in the area, and sustainability. All of the new guidances are saying if you create a program it has to be sustainable and the hand-off to the host nation or NGOs working with the host nation is appropriately done," Dr. Lawry said.



A U.S. Soldier from the 82nd Airborne provides security outside a relief distribution point in Port au Prince on Feb. 26, in the aftermath of the 7.0 earthquake that struck Haiti on Jan. 12. (Photo by MCC Robert Fluegel)

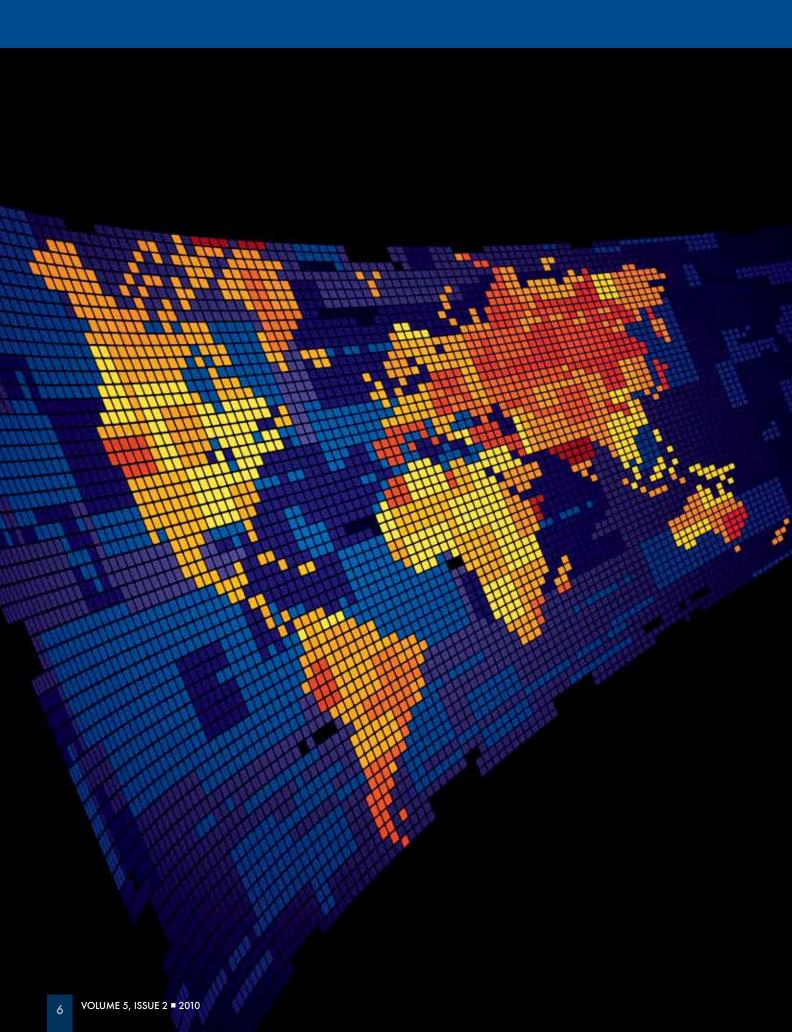
The guide is geared to disaster relief environments and the full range of complex conflict areas and peacetime situations that require health services, nutrition, shelter, communications and security. Dr. Lawry said military members who are deploying abroad should be aware that there are NGOs in the area and they need to be given instructions on what they do, who they are, and where they are. "You need to communicate with them and this gives you a guide," she said. "You need to understand your differences and their differences, and the culture clash and how to get around it."

Many times the clash comes down to a communication breakdown. "The [differences in] terminology, culture, and education," Dr. Lawry said. "Not understanding development and only understanding the military, or only understanding development and not understanding the military."

But Dr. Lawry, who worked for NGOs for 16 years before joining DoD, said it is a myth that NGOs do not want to talk to the military. She said the relationship has improved. "NGOs understand the military is not going anywhere and vice versa," she said." And this is doctrine. More people are interested in it and understand you do have to do COIN (counterinsurgency), which includes ensuring the host country's basic needs are met."

The most efficient and best way is for DoD to allow NGOs to do their job, understand their needs in the field, and provide security and development support. Dr. Lawry said the end goal of assisting the host nation is the same. "It's just the method of getting there," she said. "NGOs don't have command and control. The military can't do command and control [in international development where USAID is the lead]. So there has to be working together from the planning stage all the way through."

The "Guide to Nongovernmental Organizations for the Military" is available at http://fhpr.osd.mil/intlhealth/news.jsp?newsID=130.



New DoD Laboratory Network System

By: Richard Searles, FHP&R Staff Writer

here are numerous laboratories, programs, and activities within the Department of Defense (DoD) with analytic and/or response capabilities chemical, regarding biological, radiological, and nuclear (CBRN) events. These elements play a critical role in identifying and responding to DoD and potential civilian events involving CBRN agents as well as other hazardous agents of military significance. In an effort to help facilitate the coordination between these DoD elements, the Department is in the process of establishing the DoD Laboratory Network, DLN.

Policy and guidelines under which the DLN will operate are currently being established and can be found in the draft DoD Instruction 6440.cc. "Department of Defense Laboratory Network (DLN)". Civil Military Medicine (CMM), a division of Force Health Protection and Readiness, is the lead in cooperation with other proponents in the establishment of this new instruction. Other proponents include the Assistant to the Secretary of Defense for Nuclear and Chemical and Biological Defense Programs and the Assistant Secretary of Defense for Homeland and America's Security Affairs.

Earlier this year, CMM brought representatives from various DoD elements to the National Capital Region to discuss the draft instruction.

"All Services, the Joint Staff, and relevant Defense agencies have been actively involved in creating this instruction," said Donald Thurston, a Public Health policy analyst with CMM. "They have incorporated the input of their respective Generals Counsel."

The DoD calls for the creation of a network of DoD CBRN laboratories, programs, and activities with analytic and/or related CBRN response capabilities. The issuance establishes policy, assigns responsibilities, and provides instructions which allow the network to coordinate execution, develop consensus, and make recommendations governing the detection, identification, characterization, diagnosis, and reporting of CBRN and other all-hazards agents of military significance.

"The establishment of a coordinated and operational system of DoD laboratories, programs, and activities possessing analytic and/or response capabilities is a major step forward for DoD," said Thurston. "Once established and maintained, it will provide timely, high-quality, actionable results for early detection, confirmation, and effective consequence management of acts of terrorism or warfare involving CBRN agents, an emerging infectious disease, and other all-hazards events requiring an integrated laboratory response."

Additionally, the DLN system will:

- Ensure a clear definition of current and necessary capabilities
- Improve data collection, interrogation, interpretation, fusion, and networking
- Harmonize, validate, and enhance

quality assurance and/or quality control of laboratory protocols and methods

- Standardize the reporting of results
- Provide a unified DoD position on related issues external to DoD

Once established, the DLN will function as an active member network of the federal interagency Integrated Consortium of Laboratory Networks (ICLN) and its Network Coordinating Group (NCG) in accordance with the Memorandum of Agreement and the Integrated Consortium of Laboratory Networks Charge and Charter.

Individual DLN member laboratories, programs, and activities may also serve as members of any of the individual laboratory networks comprising the ICLN. DoD laboratories will provide Defense Support of Civil Authorities in accordance with appropriate authorizations.

The DLN requirements definition and approval process will be conducted using the Joint Capabilities Integration and Development System as specified in Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3170.01G. The report standardization and data tagging, sharing, searching, retrieving, and networking aspects of the DLN will be developed as specified in the DoD Net-Centric Data Strategy. The Information Technology (IT) systems and services supporting the operation of the DLN will be developed, tested, and certified in accordance with CJCSI 6212.01E.



Reintegration Program Filling Gap for Guard and Reserve

By: Matt Pueschel, FHP&R Staff Writer

n an effort to help National Guard and Reserve members and their families through the deployment process, and to assist in successful reintegration when returning home from war theater, the Department of Defense (DoD) has developed the "Yellow Ribbon Program". This program provides timely events, activities, information, services, referrals and other opportunities that support Service members and dependents throughout the deployment cycle.

In its inaugural year of 2008, the Yellow Ribbon Program held 1,400 events that drew close to 190,000 attendees. The program was required by the 2008 National Defense Authorization Act to provide informational activities that facilitate Guard and Reserve access to services--from the pre-deployment phase through deployment, demobilization and post-deployment. The goal of the program is to provide education and access to necessary services that can help address concerns Service members and their families may have regarding health, benefits, and/or other deploymentrelated challenges that are unique to the Guard and Reserve.

Col. Dean K. Stinson III, AV, USA, Director, Center for Excellence in Reintegration, Yellow Ribbon Program Office, explained the reason for establishing the Yellow Ribbon Program was because DoD has a robust reintegration and community support system with many resources for active

duty Service members and their families at the base installation level, but not for the Reserve and Guard community. He said Reserve and Guard members often leave a house and family behind with scarce support services when they depart for their mobilization site and until they return from deployment. Many have also been sent on multiple or extended

Reserve and Guard members often leave a house and family behind with scarce support services when they depart for their mobilization site and until they return from deployment.

deployments, with little notice. "We want to teach families and neighbors to watch after them for the entire deployment cycle," Col. Stinson advised. "[And] what can we do for the community back home? During their deployment, we want to bring their family in and try to get them prepared to grow back together, help us identify issues and [let them know] this is who you call."

In the pre-deployment phase, the Yellow Ribbon Program focuses on preparing Guard and Reserve members and their families for what the rigors of combat will entail. In the deployment phase it focuses on indentifying and helping with the challenges and stress associated with separation and combat. demobilization stations. Guard and Reserve members depart for their homes, the program seeks to educate Service members about available resources and connect them to local service providers. Reintegration events are then required at 30, 60 and 90 day intervals post-deployment to help Service members reconnect with their families and communities.

"One of my very top priorities is taking care of our men and women in uniform and their families, including our citizen soldiers," said Defense Secretary Robert Gates in remarks at the National Guard Joint Senior Leadership Conference Nov. 19 in Maryland. "We know that parents, spouses, children and caregivers are under compounded states of stress. During deployment, they run single parent households, all while worrying about the safety of their loved ones overseas. Military members who are irrevocably changed by what they have endured during their combat tour find themselves quickly reintegrated with families that have also evolved and changed during the time apart. For guardsmen there is the added challenge because they are scattered across the

state or country, lacking access to the full support of military neighbors and a full service military installation. That is why efforts such as the Yellow Ribbon Reintegration Program are so important. This program provides information, services, referrals and active outreach to soldiers, spouses, employers and youth through every mobilization stage. From its inception in March 2008 through May 2009, the program has hosted nearly 100,000 soldiers and 100,000 family members. This active outreach is key because many troops and their families are unaware of how many resources are at their disposal."

The VA is DoD's largest partner in the program and will often have a presence at Yellow Ribbon events to introduce Service members to its programs, facilitate VA enrollment, and schedule introductory physicals if desired. DoD also performs its own pre- and post-deployment health checks on Service members, and there is some effort within the program to combine events with VA.

The Yellow Ribbon Program is growing rapidly. "I think we'll double the number of events and people supported next year," Col. Stinson said. "We have to ready our program managers in the field to tailor Yellow Ribbon events to [particular] units. We're asking units [what they require] and we give commanders what they need to make it happen." The Yellow Ribbon Program currently has 10 contractors assigned to different states to serve as liaison officers to find out what state and community assets are available to support Reserve/Guard at events. "We go out and make sure the events run well," he advised.

Each Service has its own rules as to which family members can receive funded travel and accommodations to attend Yellow Ribbon events. Col. Stinson said



DoD is trying to add a provision for a designate to go with unmarried Guard/Reserve members or those who do not have close family. "A neighbor might be good because [maybe] they watch them all of the time [since they live right next door]," he advised.

A calendar of all Yellow Ribbon events sorted by Service, date, location and maps, was introduced in November on the program's Web site, www. yellowribbon.mil. "We're going to tell everybody where these events are," Col. Stinson said. "This really is a community-type thing."

Col. Stinson said program objectives include expanding the visibility of the Yellow Ribbon Program to all 54 states and territories, and collecting feedback to improve Yellow Ribbon support through its Center for Excellence in Reintegration.

Col. Stinson is further encouraging Service members from different branches to attend Yellow Ribbon Program events of the other Services. This effort ties into the program's vision of enabling Guard and Reserve components to deliver effective, timely, and uniform interservice support to Service members and their families throughout the deployment cycle, regardless of Service affiliation or location. "Each component runs their events a little differently, but the VA can come out to any event. Military One Source comes, too."

The Yellow Ribbon Program outreach services office also includes liaisons to the National Guard, VA and each of the four Reserve components.

Col. Stinson added that the program is designed to be continuous, even if the wars come to an end. "We [would] still have Reservists deployed throughout the world," he advised.



Service members, Veterans, Congress, and the media continue to raise questions pertaining to the use of burn pits in theater and whether they pose health risks to those who inhale their smoke. Therefore, the Department of Defense (DoD) is continuing its quest for scientific truth regarding the existence of long-term health risks associated with the smoke. It is known that exposure to burn pit smoke can result in irritated eyes and nasal passages, sore throats, and prolonged coughs, but any long-term health effects are less identifiable. The DoD takes the smoke exposures very seriously as part of its responsibility to ensure Service members remain protected from environmental hazards in the deployed setting.

Department's Protection and Readiness Program is focused on the identification of health risks and the protection of deployed personnel from injury and illness. The DoD has captured hundreds of air samples associated with burn pit smoke and continuously monitors health outcome data on personnel in theater and after their return. An extensive health risk assessment was accomplished at Joint Base Balad, the largest burn pit at the time, before the burn pit closed. Neither the health risk assessment (validated by the Defense Health Board) nor the health studies accomplished by the DoD have identified any specific long-term health risks. However, based on ongoing concerns from some medical providers, Service members, and Veterans, the DoD continues to study burn pit emissions. In addition, the Institute of Medicine has embarked on a comprehensive study with noted experts in environmental and occupational health to study the issue.

So why are burn pits necessary? At many forward operating bases in Iraq and Afghanistan, where few other options are available, burn pits are an expedient method of disposing solid waste. There are no landfills or local national contractors available in these areas and trash that is not disposed of in a timely manner can attract rats and disease transmitting insects that pose serious public health risks. Burn pits vary in size, generally correlating to the number of personnel assigned to a location. Some installations have burn pits that are quite large like the pit that covered multiple acres at Joint Base Balad (closed Oct 2009). At smaller forward operating bases there may only be a single trench or barrel where waste is burned. The amount and type of trash being burned and the amount of smoke produced will vary on a camp by camp basis - though hazardous items are always prohibited from being burned. The direction of the wind and the actual location of the burn pit, trench or barrel determines the degree of smoke exposure, if any, to personnel.

U.S. Central Command committed to reducing smoke exposure for personnel in Iraq, Afghanistan, and elsewhere. They are working to install incinerators wherever feasible; working to prevent or reduce the smoke exposures by repositioning burn pits to locations where the smoke does not expose personnel; improving the regulation of materials being burned; and implementing waste reduction policies including the use of recycling and composting wherever possible. As of March 2010, there were 28 solid waste and 23 medical waste incinerators in Iraq (all operational), and 13 more are to be installed under an expedited construction schedule. In Afghanistan, one solid waste incinerator, five Munson burners (concrete boxes which burn waste at high temperatures to reduce harmful emissions), and 13 medical waste incinerators were operational, with over 125 additional units in the planning stage.

The DoD recognizes that burn pit smoke exposures, no matter the size of the burn pit, adversely affect quality of life and also result in some relatively mild, and usually temporary health effects in our Service members. Although there is no evidence that burn pits have harmed the long-term health of our Service members, the DoD is not yet satisfied, so they continue to study burn pits and personnel exposed to the smoke to identify ways to reduce exposures and potential risks. DoD believes, however, it is plausible that certain individuals who may be more susceptible to the effects of burn pits may be adversely affected. The reasons for this could be genetic, medical history of illnesses suffered in the past, pre-existing medical conditions, or combined exposures to airborne sand and dust, tobacco smoke, diesel exhaust, industrial pollutants, or other airborne hazards. Efforts to understand more about burn pit emissions are ongoing, and additional health studies are underway. The DoD will continue to monitor and sample additional burn pits throughout 2010. In the meantime, U.S. Central Command is working hard to reduce smoke exposures. Individuals who feel they have been adversely affected by burn pit smoke should seek treatment at a DoD medical treatment facility or the Department of Veterans Affairs, depending on eligibility.

The Bridge to Mental Wellness: The inTransition Program

By: Peter Graves, FHP&R Staff Writer

very American knows and understands the risks those who choose to serve our nation in uniform take when they enlist. The threat of death or serious injury is

always present. It's part of the job for warriors in all Services. But there are other dangers, away from the guns and bombs, which can seriously impact even the most hardened veteran. These are the dangers of the mind.

Most Americans would probably associate psychological trauma experienced by American troops as the result of combat. There is no doubt exposure to combat, death, and destruction, can lead to inner wounds which cannot be seen. But these wounds of the mind can be triggered by other events as well. Separation from children and family, financial burdens, living in remote reaches of the world for months on end: each of these can create a tremendous burden that can exhaust even the most seasoned veteran of combat. Sometimes, the pressure becomes too much, and Service members need the assistance of a professional to cope.

The Department of Defense (DoD) takes great pains to ensure Service members who need help to maintain their mental wellness receive it. But as with any wound, a necessary element for recovery is time. And as soldiers, sailors, marines, and

airmen know, orders from above can and often do trump time.

Are You a Service

Member in Transition?

Are you concerned about your mental health treatment?

The inTransition Program:

The inTransition Program:

For service members recolving mental health treatment?

The inTransition Program:

For service members recolving mental health treatment?

That's why
DoD has developed
inTransition. inTransition
is a program which offers

Service members receiving mental health treatment a bridge to their next provider in case of transfer or separation from the service. Its purpose is to ensure the needs of the individual are met regardless of orders or mission requirements. It's about continuity of care – vital to those enhancing mental wellness with the assistance of a professional.

"The Defense Department is very familiar with transitions and how difficult they can be," said Lt. Cdr. Nicole Frazer, USPHS, senior policy analyst for the Psychological Health Strategic Operations division within Force Health Protection & Readiness Programs. "We want to minimize the hassles, stress, and barriers to receiving mental health care across

systems or providers – and ensure no one falls through the cracks."

Service members may utilize the program by calling a toll-free or collect number depending on their location, or by visiting the inTransition Web site. Their current mental health provider may also call on their behalf with the concurrence of the Service member.

Once a Service member signs up for the program he will be assigned a Transitional Support Coach (TSC). These coaches are licensed, master's-level behavioral health clinicians specially

trained and skilled in understanding today's military culture. The TCS's job is to work with the Service member one-on-one, with the ultimate goal of connecting the Service member to their new mental health provider at their new location.

inTransition

TSCs remain in contact with the Service member throughout their transition, offering such assistance as providing



transition to their new provider," Lt. Cdr. Frazer said. "We don't want the transition to be a barrier in terms of continuing or remaining with mental health care."

inTransition is free, voluntary, and most importantly, confidential. The program is open to all Service members in every branch - including the Reserves - who are currently receiving mental health treatment and are either relocating to a new assignment, transitioning from active duty to veteran, veteran to active duty, or returning to civilian life. TSCs are available to assist with any type of transition, including mental health provider transitions to the Department of Veterans Affairs (VA) health care system.

Protection and Readiness (FHP&R) to develop a program that would allow for the continuity of mental health care across transitions between military medical treatment facilities (MTFs) and affiliated health care systems, including the VA and Tri-Care.

wellness is integral to the overall health and morale of our forces. The DoD considers it incumbent for Service members to receive the help they need whenever and wherever they are. inTransition is there to help.

To take advantage of inTransition, please call toll-free: 1-800-424-7877 (Continental U.S., including Hawaii and Alaska) 1-800-424-4685 (Outside the U.S.) 1-314-387-4700 (Outside the U.S. Collect) or visit www.health.mil/inTransition

Human Research Protections and Oversight: What Service Members Need to Know

By: Laura Curtin, FHP&R Staff Writer

ow does the Department of Defense (DoD) determine what helmet soldiers should wear on the battlefield? What medical techniques could aid wounded warriors with the pain associated with limb loss? Questions such as these are posed by commanders and scientists alike. Investigation through research studies makes progress and remedies to these questions possible. And, research projects often help military operations move forward.

DoD funded research is conducted to support both the overall health of our nation's military personnel and the resilience of those performing missions. Many important discoveries would not be possible without human participant research. Vaccine development; survey research on the effectiveness of DoD's casualty assistance program; potential relationships between vitamin levels and pain management; uniform equipment ergonomics; and the effects of deployment on children are just a few examples of research DoD conducts. The system of oversight in place allows researchers to perform studies that are both ethically and scientifically sound.

Reinforcing Participant Protections

DoD is committed to protecting research participants' rights. In fact, another measure has been added to its ethical standards for human participant research protections through specific contracting language. A final rule amending the

Defense Federal Acquisition Regulation Supplement (DFARS) now contains a clause for use in contracts that include or may include research involving humans. The specific contracting language in the recently endorsed DFARS clause is new, but the underlying requirement is not. The clause reinforces current regulations

Every person has a choice to be part of the study, and Service members do have the responsibility to know their own rights.

for protection by adding procedures on how to apply the ethical requirements uniformly. It also identifies key roles and responsibilities.

The newest element in a comprehensive research oversight system, and the most important new responsibility, rests with the Human Research Protection Official (HRPO). The HRPO for the Under Secretary of Defense for Personnel and Readiness is the Deputy Assistant Secretary of Defense (DASD) for Force Health Protection and Readiness. As HRPO, the DASD is responsible for

ensuring that research conducted through contracts meets the highest ethical and scientific standards. Obviously, the DASD cannot personally review every research project, so there is a program manager who trains a cadre of reviewers to exercise this authority. The reviewers who support the HRPO's oversight are called Secondary Review Officials (SRO). The SROs are responsible to the DASD and the DASD is responsible to those participating in DoD research.

The Uniform System of Research Oversight

The central component within the research protection process is called an Institutional Review Board (IRB). The IRB is a group of individuals with authority and responsibility to review all research and ensure it is compliant with both scientific and ethical requirements. What is unique about the IRB is that these individuals are specifically empowered by Federal regulations to protect research participants' rights. All recommendations for research study approval and modification are determined by the IRB, and a commander cannot overturn an IRB decision.

Another piece of the protection program is vested in the research institution itself. Any institution, including the military, engaged in federally funded or sponsored research involving humans must have what is called an Assurance. An Assurance

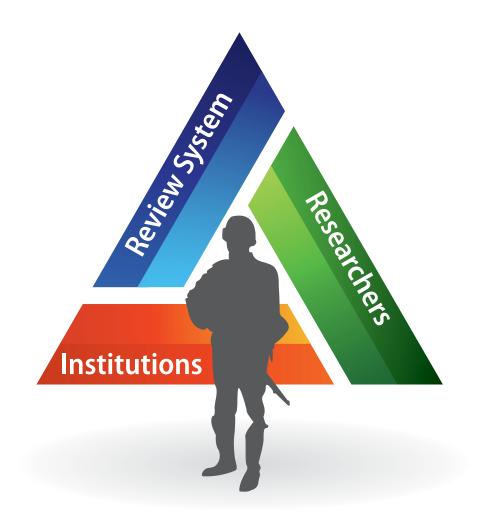
documents the institution's commitment to comply with all laws, regulations, and ethical guidelines. It essentially describes the program and identifies who governs the process.

Institution officials make sure that research follows the IRB's rules. They also review studies to ensure that participants are not overburdened and that there would be little disruption to the institution's environment. For example, survey research can be time consuming for the participant. Surveys also often provide very important information that assists with formation of DoD policies and aids officials who report to Congress. The institution will evaluate if the survey is important to the overall mission, and considers how it could impact their population.

Service Members' Responsibilities

Service members should know that they are protected by a very specific system and do have rights that can be exercised freely. Every study requires informed consent, whereby the general purpose is explained and the participants are educated on duration and any potential risks. Every person has a choice to be part of the study, and Service members do have the responsibility to know their own rights. No questions are asked, and no repercussions will follow any Service member who exercises them.

Personnel should also know that a sequence of milestones occur before clinical studies even reach the phase of including humans. For example, vaccine studies begin in the laboratory with cells. If significant findings develop, the studies evolve to animal testing with species that are biochemically similar to humans. If significant findings are shown to be safe and effective, researchers will move into a trial phase with humans where they test for a safe dosage level and test to avoid



harmful side effects. It is only much later in the research process that a mass vaccine trial study will occur – because at this stage, the vaccine has demonstrated efficacy and safety.

Human involvement with research studies is designed to not only improve the quality of life for the Service member, but also to develop new medical procedures for certain injuries and diseases. Research is vital to forming medical treatment procedures for the combat command surgeon's use on the battlefield and to treating a variety of diseases. Significant improvements in medical treatments offer

many potential implications for both military and civilian medicine.

More Information on the DFARS Clause

The DFARS regulation was added to further strengthen protections. It holds contractors accountable to DoD's standards. The exact language of the federal policy is codified at section 48 in the Code of Federal Regulations (CFR) under parts 207, 235, and 252. For more information about the new rule, contact the Research Regulatory Oversight Department for the Office of the Under Secretary of Defense for Personnel and Readiness by email at hrpp@tma.osd.mil.



DoD/VA Center Tracks Increasing Eye Injuries Improving Vision Research, Care

By: Matt Pueschel, FHP&R Staff Writer

The new Vision Center of Excellence (VCE) is beginning to take flight since it was formed at the behest of Congress to track eye injuries emanating from the war theater and improve treatment outcomes across the Services and VA.

"It's important to look at how injuries are occurring, what can we do to mitigate the extent of morbidity when doing treatment, and how can we enhance treatment and research, and improve the rehabilitation process to bring better functioning in life to patients," advised Col. Donald A. Gagliano, MD, MHA, DoD Principal Advisor for Vision, and VCE's Executive Director.

VCE was formed after the FY '08 National Defense Authorization Act directed DoD and VA to establish a center of excellence in the prevention, diagnosis, mitigation, treatment, and rehabilitation of military eye injuries, and to better coordinate visual rehabilitative care and benefits for Service members' continuum of care between the agencies. The need for the VCE is evidenced in the variety of injuries that impact soldiers' vision, from traumatic eye injury as a result of explosive devices and projectiles, to vision disorders associated with TBI, and eye injury caused by exposure to chemicals, biohazards, lasers or extreme environmental conditions.

Col. Gagliano said there are increasing numbers of eye injuries occurring among Service members from OEF/ OIF compared to previous conflicts. According to the Medical Surveillance Monthly Report of the Armed Forces Health Surveillance Center, more than 1,000 ocular injuries caused by war, guns and explosives were treated in fixed hospitals from 2003 to 2007. "We're also starting to see visual disorders with TBI, so we're looking at that," he said.

About 60 to 70 percent of severe and moderate TBI cases and 40 percent of mild TBI cases include some form of visual impairment such as nerve damage from concussive events. "Mild TBI is still an enigma," Col. Gagliano advised. "We're looking at clinical symptoms and maybe some cognitive testing. Some of the blast exposure injuries are injuries to the globe. When a blast wave hits your eye, it causes tissue, retinal, nerve, and zonular injury and we don't understand it well. It's like two times the force of being punched. The eye is compressible, so we're looking at how to mitigate it."

Better Tracking

VCE is spearheading the development of the new Defense and Veterans Eye Injury and Vision Registry (DVEIVR) which will record and follow the occurrence, treatment, and outcomes of all eye injuries experienced by active duty Service members since 9/11. Col. Gagliano said this will show how patients with the same types of injuries were treated and allow the VCE to focus research more effectively, evaluate DoD and VA healthcare processes, and establish treatment guidelines. "It will allow us to manage both individuals and cohorts of patients, analyze outcomes, improve care, and enact change," he said.

A key goal of the database is to develop a common documentation strategy for vision care among DoD's and VA's varying health records. "We spent two years developing the database and getting the DoD electronic health records from nine different systems to talk to each other," Col. Gagliano said. "We want to track outcomes, but we need incidence data in order to get to outcomes. We think we're getting closer [with] VA and DoD sharing information. When we first started, there were two separate registry projects, and now there is one joint registry."

The aim is to follow Service members from the point of injury in theater through joint medical and patient tracking systems until they get to the U.S. Because little information is available about eye injuries occurring in theater, VCE is also developing an eve module for trauma wounds. "We have a lot of ophthalmologists in theater who worked on [recording eye injuries in] spreadsheets, so we're bringing that information in," Col. Gagliano advised. "If we make more information available to providers, we think we'll be able to improve care. My goal is to gather all information [on eye injuries and care] back to '01. After that, we'll go back to the first Gulf War."

The joint registry will also provide a synergy with other centers of excellence being developed for Service members exposed to blasts, such as one on hearing issues. Blast injuries can cause hearing and vision problems as well as limited sense of smell and taste. "This is why Congress put together this grouping of registries [to look at] how do we bring people with sensory deficits to function better in life," Col. Gagliano said.

Looking Ahead

Another component of the VCE is to focus vision research on eye trauma, TBI post-traumatic visual syndrome, refractive surgery, and degenerative eye diseases. Col. Gagliano sits on a joint committee that establishes priorities for the new Vision Research Program. With a limited



Col. Gagliano, Executive Director, VCE, aims to create a registry to follow the care of Service members with eye injuries from the point of injury in theater through their return to the U.S.

amount of funds (\$3.75 million this year) and many research proposals to consider, the program has a focus of five topic areas: developing treatments for TBI-associated visual dysfunction; treatments to slow or stop vision loss in traumatic optic neuropathies; computational models of mechanisms of primary blast injury to the eye and vision system; methods to test visual dysfunction in the presence of cognitive impairment; and treatments for blast and burn injury to ocular structures. "Our real priority is the blast model and how we mitigate that, and direct research efforts towards fixing the problem," Col.

Gagliano advised.

VA only funds intramural vision research, but has special centers focused on TBIrelated vision disorders, researching the use of implants and artificial mechanical means to restore some vision, and developing new techniques for visual rehabilitation. Meanwhile, DoD jointly funds other special vision research projects with the National Eye Institute and is working with the Food and Drug Administration to examine refractive surgery outcomes and set a baseline standard. "We do more refractive surgery in DoD than any other entity in the country," Col. Gagliano said. "Our outcomes and satisfaction are very high. It's an operational requirement, so I want to capture that information on refractive surgery outcomes and track them through to VA."

VCE is in the process of building its staff and spaces and will have a deputy director from the VA as part of an organizational office scheduled to open soon in Crystal City, Va. Eventually there will be a mix of optometrists, ophthalmologists, and vision rehabilitation specialists as part of a 25-member staff based in a clinical component that will serve as VCE's headquarters at the new Walter Reed Medical Center in Bethesda in 2011. The VCE received \$4 million from Congress to carry out the necessary renovations for the space over the next year. "We'll be opening the new VCE at the new hospital and it will be co-located with an optometry, ophthalmology, and refractive surgery center, and we'll build a space for outreach [including] computer stations for visually impaired Service members and veterans so they can use it as a resource for information," Col. Gagliano said, adding that VCE will have nurse vision care coordinators and capabilities that support six MTFs throughout the country.

VA has further agreed to fund several VA visual clinical care and policy positions in the VCE, but both the DoD and VA positions are being filled deliberately, pending funding. For more information, please visit http://www.visioncenterofexcellence.org/.



Getting a Good Night's Sleep

By: Dr. Kevin T. Mason MD, MPH and Ms. Ann Stark, ARNG Decade of Health

Sleep is an essential part of living that is regulated by internal clock sleep hormone cycles, and affected by daylight cycles. We have an urge to wake up when the sun comes up. When the sun goes down, we get sleepy. We cannot live without sleep. Without sleep, we retain our instinct to escape by maintaining our physical strength and ability to run, but we develop poor judgment, high or low mood, gastrointestinal upset, memory difficulties, and hallucinations. Eventually, deprived of sleep, the body will simply shut down.

Sleep is a complex process, and moving through the five stages of sleep is, believe it or not, quite a physical and mental workout. The first two stages are light sleep where sounds, light, and motion might wake you, and you are physically active with restlessness and jerking movements of the extremities. The next two stages are deep sleep when the brain waves slow down and muscle motion stops, and it is harder to wake up. The final stage is the rapid eve movement (REM) sleep stage full of brain activity, rapid eye movements, dreams, talking, and other brain activities. It is possible to observe REM sleep first-hand as the family dog snoozes and mentally chases rabbits and woofs. Some people solve problems or come up with brilliant ideas in REM. During REM one loses body temperature regulation and may feel cold and reach for a cover. During sleep the metabolic rate falls and muscles get a chance to rebuild. It takes about 90 minutes to complete all five stages, and then the process begins again for a total of three to five cycles per night.

What constitutes a good night's sleep is highly variable among people and changes as we age. An old adage, "Early to bed, early to rise" may hold true for some, but there are many combinations of individual sleep patterns. Some people need a few hours of sleep and few cycles to recharge their batteries, while others need eight to twelve hours of sleep and more cycles to face the dawn. Variability, while interesting, can be challenging when trying to adjust to the natural sleep cycles of others.

One thing is certain however, if you are deprived of sleep, or disrupt your sleep too often, you will become unhealthy. Unfortunately, the transition from a slow paced farmer lifestyle to a high paced, industrial lifestyle increases the risk for sleep debt, the amount of quality sleep that you owe your body. In the near term, you have poor mental performance at school or work, mood swings, altered thoughts, and increased risk for accidental injury. In the long term, you are at increased risk for weight gain, cardiovascular disease, mental disorders, and social problems.

Data collected by the Armed Forces Health Surveillance Center shows that visits by male troops to clinics for sleep problems has risen significantly within the last three years. All Service members must learn how to function, adapt, and operate with the sleep disruptions caused by training and combat operations, especially when crossing time zones rapidly or entering high tempo operations. Be aware of the unit's sleep discipline policies, and if there is not one in place, ask your command surgeon to work with subject matter experts and your command staff to develop policies. Following the policies reduces your risk for accidents and bad decisions, and improves combat effectiveness, mission completion, and well-being.

Sleep should be regarded as one of the most important elements of overall health and wellness, and requiring eight hours of sleep should not be viewed as a sign of weakness. For Service members sleep deprivation can contribute to a wide array of operational performance problems. According to the Walter Reed Institute of Research's Department of Behavioral Biology, "Sleep deprivation, both partial

and total, degrades cognitive performance. The ability to do useful mental work declines by 25 percent for every successive 24 hours awake."

Sleep and restoration must be a team effort with leaders reinforcing the need for rest, and soldiers becoming more aware that sleep is an equal player along with good nutrition and regular exercise to maintain overall physical and mental well being. Assess your sleep intelligence by visiting the Sleeping Better section of www.afterdeployment.org and learn more from peers and experts to help you get the good night's sleep you need and deserve.

For more information please visit the Armed Forces Surveillance Center Web site, www.afhsc.army.mil.

Sleep Tips for ARNG Commanders and Soldiers

- Acknowledge that sleep is not a choice, but a necessity for optimal mission performance.
- Know your unit's sleep plan and work with the command surgeon to develop one.
- Stick to a healthy, allowable sleep schedule. Limit late night activities such as socializing, video games, phone calls, etc.
- Sleep problems, particularly nightmares, can signal more serious mental health issues.
- Do not dismiss sleep concerns. Professional help and advice is readily available.

Good Sleeping Habits

- Keep the same sleep schedule.
- Avoid big meals, alcohol, caffeine, exercise, TV, and computer use before sleep.
- Do something relaxing before sleep, like light reading or warm bath/shower.
- Naps can be beneficial for restoring focus and energy.
- Wake with the sun as much as possible.

How Much Sleep is Necessary?

INFANTS

(0–2 months) 10.5–18 hours (2–12 months) 14–15 hours

TODDLERS/CHILDREN

(12–18 months)	13–15 hours
(18 months-3 years)	12–14 hours
(3–5 years)	11–13 hours
(5–12 years)	9–11 hours

ADOLESCENTS 8.5–9.5 hours

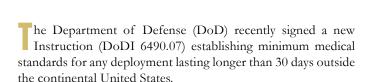
ADULTS 7–9 hours

Source: National Institutes of Mental Health from the National Sleep Foundation Web Site.



Updated Medical Standards For Deployments Outside U.S.

By: Kelly Kotch, FHP&R Staff Writer



Who does this affect?

It affects all Service members, including Reservists, and DoD civilians. It does not apply to contractor personnel who deploy because they are governed by the terms of their contract and a separate DoD Instruction.

Why is the Instruction on deployment-limiting medical conditions important?

This instruction creates a minimum medical standard for all DoD personnel who deploy, whether military or civilian. It ensures the health and safety of all personnel abroad as well as the availability of sufficient medical assets to support the wartime mission, rather than providing care for pre-existing conditions in personnel who were not medically qualified to deploy.

When is this Instruction effective?

Immediately.

How does this impact my Service's medical standards?

This new instruction does not alter or replace any Service accession, retention, or fitness for duty requirements. It does not replace stricter readiness or deployment requirements of a Service or unified combatant command, such as USCENTCOM. This new standard applies only to deployment and only establishes a minimum or baseline requirement.

What are the new medical standards for deployment?

Generally, the policy behind the new deployment medical standards is that personnel with an existing medical condition should be able to deploy if they meet all of the following conditions:



- 1. Medical condition is stable and unlikely to get worse.
- 2. If the medical condition were to get worse in theater, it would not negatively impact the mission or have a serious medical outcome.
- Any necessary continuing health care is available at deployment location.
- Prescribed medication has no special handling or storage requirements and would be tolerant of within the particular environmental conditions.
- 5. In the case of military personnel, the medical condition will not require a duty limitation.

Civilian employees may receive reasonable accommodations in their job, but they must be able to perform the essential functions of the deployed position.

What are some general medical conditions that may limit deployment?

- Any condition that prevents personnel from wearing required protective gear.
- Any condition that prohibits required immunizations.
- Any condition that would require frequent clinical visits.
- Any condition requiring medical equipment or appliances not available in theater.
- Any condition that would impair performance.

What are some examples of specific medical conditions that might restrict deployment?

Examples include some heart diseases, psychotic and bipolar disorders, cancer, pregnancy, as well as conditions currently undergoing an extended course of treatment by specialists such as postoperative rehabilitation.

Can I receive a waiver for any of these deployment-limiting medical conditions?

Yes. There is a formal waiver process for both military and civilian personnel. The request for a waiver is submitted by the Service, although the Combatant Commander is the final approval authority for a waiver in the presence of a deployment-limiting medical condition.

Helpful Resources

Force Health Protection and Readiness (FHP&R) fhpr.osd.mil

Deployment Health & Family Readiness Library deploymenthealthlibrary.fhpr.osd.mil

GulfLINK gulflink.fhpr.osd.mil

DeployMed ResearchLINK fhpr.osd.mil/deploymed

Post-Deployment Health Reassessment fhp.osd.mil/pdhrainfo/index.jsp

Military Health System health.mil

TRICARE www.tricare.osd.mil

DoD Deployment Health Clinical Center (866) 559-1627 www.pdhealth.mil

Department of Veterans Affairs (800) 827-1000 www.va.gov

Defense Centers of Excellence www.dcoe.health.mil

For a subscription, please write to FHPWebmaster@tma.osd.mil or Force Health Protection and Readiness ATTN: FHP&R Magazine 5205 Leesburg Pike One Skyline Plaza, Suite 810 Falls Church, VA 22041

FHP&R is looking for interesting stories about health-related topics. Please submit ideas and stories to FHPWebmaster@tma.osd.mil.

Yellow Ribbon Program www.yellowribbon.mil

Vision Center of Excellence www. visioncenterofexcellence.org

InTransition www.health.mil/inTransition

DoD Mental Health Self-Assessment Program www.pdhealth.mil/mhsa.asp

National Suicide Prevention Lifeline 1-800-273-TALK (8255)

FHP&R on Twitter twitter.com/forcehealth

Armed Forces Surveillance Center www.afhsc.army.mil







